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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number

10/084,825

Filing Date

February 25, 2002

First Named Inventor

Co, Man Sung

Group Art Unit

Unassigned

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JAN 17 2003

Examiner Name

Unassigned

Total Number of Pages in This Submission

32

Attorney Docket Number

011823-004012US TECH CENTER 1600/2900

ENCLOSURES (check all that apply)

Fee Transmittal Form

Fee Attached

Amendment / Reply

After Final

Affidavits/declaration(s)

Extension of Time Request

Express Abandonment Request

Information Disclosure Statement (2 pgs.) attached with SB08A (1 pg.) & SB08B (3 pgs.)

Certified Copy of Priority Document(s)

Response to Missing Parts/ Incomplete Application

Response to Missing Parts under 37 CFR 1.52 or 1.53

Assignment Papers
(for an Application)

Drawing(s)

Licensing-related Papers

Petition

Petition to Convert to a Provisional Application

Power of Attorney, Revocation Change of Correspondence Address

Terminal Disclaimer

Request for Refund

CD, Number of CD(s)

After Allowance Communication to Group

Appeal Communication to Board of Appeals and Interferences

Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)

Proprietary Information

Status Letter

Other Enclosure(s)
(please identify below):

1.) Return Postcard

2.) 5 Reference Copies (25 pgs.)

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm
and
Individual name

Townsend and Townsend and Crew LLP

Rosemarie L. Celli

Reg. No. 42,397

Signature

Date

January 10, 2003

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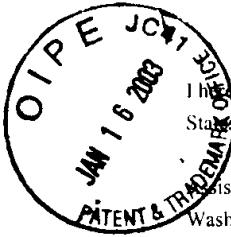
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On 1-16-03

TOWNSEND and TOWNSEND and CREW LLP

By: Leticia Hernandez
Leticia Hernandez

PATENT
Attorney Docket No.: 011823-004012US

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Co et al.

Application No.: 10/084,825

Filed: February 25, 2002

For: INCREASING ANTIBODY
AFFINITY BY ALTERING
GLYCOSYLATION OF
IMMUNOGLOBULIN VARIABLE
REGION

Examiner: Unassigned

Art Unit: Unassigned

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98**

Assistant Commissioner for Patents
Washington, D.C. 20231

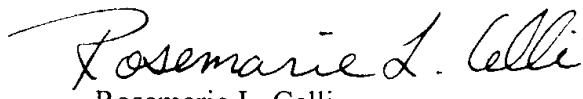
Sir:

The references cited on attached PTO/SB/08A and PTO/SB/08B forms are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references 1-9, 11-15, 18-23, 25-37, and 39 can be found in Application No. 08/862,871, filed May 23, 1997 (Attorney Docket No. 011823-004011US). Copies of references of 10, 16-17, 24, and 38 are enclosed herewith. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,


Rosemarie L. Celli
Reg. No. 42,397

TOWNSEND and TOWNSEND and CREW LLP
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/084,825
Filing Date	February 25, 2002
First Named Inventor	Co, Man Sung, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	011823-004012US

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U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	6,054,297	04-25-2000	Carter et al.	
	2	5,821,337	10-13-1998	Carter et al.	
	3	5,730,982	03-24-1998	Scheinberg	
	4	5,714,350	02-03-1998	Co et al.	
	5	5,147,637	09-15-1992	Wright et al.	

FOREIGN PATENT DOCUMENTS

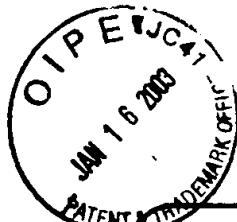
Examiner Initials ⁴	Cite No. ¹	Foreign Patent Document		Publication Date MMDDYYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴ Kind Code ⁴ (if known)				
	6	WO	90/07861	07-26-1990			<input type="checkbox"/>
	7	WO	92/22653	12-23-1992			<input type="checkbox"/>
	8	EP	0 239 400	09-30-1987			<input type="checkbox"/>
	9	EP	0 438 312	07-24-1991			<input type="checkbox"/>
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

2 of 4

Complete if Known

Application Number	10/084,825
Filing Date	February 25, 2002
First Named Inventor	Co, Man Sung, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned

Attorney Docket Number

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OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published.
	10	AMIT et al., "Three-Dimensional Structure of an Antigen-Antibody Complex at 2.8 Å Resolution," <i>Science</i> , 1986, 233:747-753.
	11	ARNAOUT et al., "Leukocyte Adhesion Molecules Deficiency: Its Structural Basis, Pathophysiology And Implications For Modulating The Inflammatory Response," <i>Immunol. Rev.</i> , 1990, 114:145-180.
	12	BURGESS, "Possible Dissociation of the Heparin-binding and Mitogenic Activities of Heparin-binding (Acidic Fibroblast) Growth Factor-1 from Its Receptor-binding Activities by Site-directed Mutagenesis of a Single Lysine Residue," <i>Journal of Cell Biology</i> , 1990, 111:2129-2138..
	13	CARTER et al., "Humanization of an Anti-p185 ^{HER2} Antibody for Human Cancer Therapy," <i>Proc. Natl. Acad. Sci. USA</i> , 1992, 89:4285-4289.
	14	CO et al., "Chimeric and Humanized Antibodies with Specificity for the CD33 Antigen ¹ ," <i>Journal of Immunology</i> , 1992, 148:1149-1154.
	15	DAUGHERTY et al., "Polymerase Chain Reaction Facilitates the Cloning, CDR-grafting, and Rapid Expression of a Murine Monoclonal Antibody Directed Against the CD18 Component of Leukocyte Integrins," <i>Nucl. Acids Res.</i> , 1991, 19(9):2471-2476.
	16	DELENTE, "Glycosylation revisited," <i>Trends in Biotechnology</i> , 1985, 3(9):218.
	17	GROVES et al., Production of an Ovine Monoclonal Antibody to Testosterone by an Interspecies Fusion, <i>Hybridoma</i> , 1987, 6(1): 71-76.
	18	HARRIS, "Therapeutic Antibodies - The Coming of Age," <i>TIBTECH</i> , February 1993, 11:42-44.
	19	HIRD et al., "Genes and Cancer," Chapter 17, 1990, 183.
	20	JONES et al., "Replacing the Complementarity-determining Regions, In a Human Antibody with those from a Mouse," <i>Nature</i> , 1986, 321:522-525.
	21	LAZAR et al., "Transforming Growth Factor α : Mutation of Aspartic Acid 47 and Leucine 48 Results in Different Biological Activities," <i>Molec. Cell. Biol.</i> , 1988, 8(3):1247-1252.
	22	LEATHERBARROW et al., "Effector Functions of a Monoclonal Aglycosylated Mouse IgG2a: Binding and Activation of Complement Component C1 and Interaction With Human Monocyte Fc Receptor," <i>Molec. Immunol.</i> , 1985, 22(4):407-415.
	23	MURAOKA and SHULMAN, "Structural Requirements for IgM Assembly and Cytolytic Activity," <i>J. Immunol.</i> , 1989, 142(2):695-701.

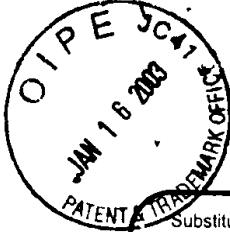
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet 3 of 4

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Application Number	10/084,825	JAN 17 2003	
Filing Date	February 25, 2002		
First Named Inventor	Co, Man Sung, et. al.		
Art Unit	Unassigned		
Examiner Name	Unassigned	TECH CENTER 1600/2900	
Attorney Docket Number	011823-004012US		

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OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published.
	24	PAUL, "Fundamental Immunology," 1993, Chapter 8, pg. 242, Raven Press NY.
	25	QUEEN et al., "A Humanized Antibody that Binds to the Interleukin 2 Receptor," <i>Proc. Natl. Acad. Sci. USA</i> , 1989, 86:1029-1033.
	26	RIECHMANN et al., "Reshaping Human Antibodies for Therapy," <i>Nature</i> , 1988, 332:323-327.
	27	SCHEINBERG et al., "Monoclonal Antibody M195: A Diagnostic Marker for Acute Myelogenous Leukemia," <i>Leukemia</i> , 1989, 3(6):440-445.
	28	SCHEINBERG et al., "A phase I Trial of Monoclonal Antibody M195 in Acute Myelogenous Leukemia: Specific Bone Marrow Targeting and Internalization of Radionuclide," <i>J. Clin. Oncol.</i> , 1991, 9(3):478-490.
	29	SOX, "Attachment of Carbohydrate to the Variable Region of Myeloma Immunoglobulin Light Chains," <i>Proc. Natl. Acad. Sci.</i> , 1970, 66(3):975-982.
	30	TANIMOTO et al., "Restricted Expression of an Early Myeloid and Monocytic Cell Surface Antigen Defined by Monoclonal Antibody M195," <i>Leukemia</i> , 1989, 3(5):339-348.
	31	TAO et al., "Studies of Aglycosylated Chimeric Mouse-Human IgG," <i>Journal of Immunology</i> , 1989, 143:8.
	32	TAYLOR et al., "Selective Removal of α Heavy-chain Glycosylation Sites Causes Immunoglobulin A Degradation and Reduced Secretion," <i>Molec. Cell. Biol.</i> , 1988, 8(10):4197-4203.
	33	VERHOEYEN et al., "Reshaping Human Antibodies: Grafting an Antilysozome Activity," <i>Science</i> , 1988, 239:1534-1536.
	34	WALDMANN, "Monoclonal Antibodies in Diagnosis and Therapy," <i>Science</i> , 1991, 252:1657-1662.
	35	WALLICK et al., "Glycosylation of a V_H Residue of a Monoclonal Antibody Against (put in alpha) (1 \rightarrow 6) Dextran Increases Its Affinity For Antigen," <i>J. Exp. Med.</i> , 1988, 168:1099-1109.
	36	WRIGHT et al., "Antibody Variable Region Glycosylation: Position Effects on Antigen Binding and Carbohydrate Structure," <i>EMBO J.</i> , 1991, 10(10):2717-2723.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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	37	WRIGHT et al., "Identification of the C3bi Receptor Of Human Monocytes and Macrophages by using Monoclonal Antibodies," <i>Proc. Natl. Acad. Sci. USA</i> , 1983, 80:5699-5703.	
	38	WRIGHT et al., "Springer Semin Immunology," 1993, 15:259-273.	
	39	ZOLLER et al., "Oligonucleotide-Directed Mutagenesis of DNA Fragments Cloned into M13 Vectors," <i>Methods in Immunology</i> , 100:469-500.	

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